

## SETalk

international check for me and that would take some time.

So you have decided to go to South Africa for the eclipse... ;-)

I have chosen Australia and will bring 80 people to watch it from Ceduna - and yes, I know that the possibility of clear weather is better when you go inland, but it also gets very much hotter!!! So I take the chance and hope to enjoy the eclipse with a gentle seabreeze...

And I have reserved 12 berths at Quark Expeditions for the 2003 eclipse, so I hope that some will buy them... :-) Clear skies! Henrik Glinborg

From : MrEclipses@aol.com

Just wanted everyone to know that the deadline for Patrick and Joanne's gift is now March 10. It's not too late to show them your appreciation for SEML, eclipse conferences and their wedding! Thanks, Fred Espenak

## Solar eclipse chat room

From : Mike Simmons <msimm@ucla.edu> To : solareclipses@Aula.com Date : Thu, 28 Feb 2002 10:11:00 -0800

The following was posted on the sci.astro.amateur newsgroup. I haven't been to this chat room. I'm just passing on the information for anyone that's interested. Mike Simmons

Subject: Solar eclipses chat Date: Thu, 28 Feb 2002 12:00:17 +0100 From: "DeMa" <ndema@astrax.hannover.sgh-net.de> Organization: Tiscali - A european company Newsgroups: sci.astro.amateur

Hello \*, if you have watched or plan to watch solar eclipses, here's an online chat dedicated to that topic: <http://www.beepworld.de/members5/dokufuzzy/talkeclipse.htm>

December this year hopefully someone who can see the eclipse live will join that chat to report a bit. The Africa eclipse had such a kind of chat and it was fun to get some impressions from there.

Cheers, Detlef.

--

D. Marxsen For email please omit the leading "n" in my address as I ignore emails to the ndema account normally.

## ASE 2001

## Annular Eclipse Photo Contest-Costa Rica

From : Alejandra León-Castellá <leonale@racsa.co.cr>  
To : SOLARECLIPSES@AULA.COM Date : Mon, 11 Feb 2002 06:30:53 -0600

Dear eclipse followers, Here is the report and the pictures that won the Costa Rican Annular Eclipse Photography Contest. There were 2 categories. The first was the phenomenon itself and the second category was the environment around it. The young man -George Denyer- who won the first one was a lucky guy who decided not to travel too far and stayed in Tivives, this is a location south of Puntarenas, about half way to where Olivier, Vic and Jen were in Punta Leona.

Roberto Feigenblatt Reyes, who won the \*Environment\* category, was in inland in Guanacaste, close to the Tempisque ferry when he shot his winning photo.

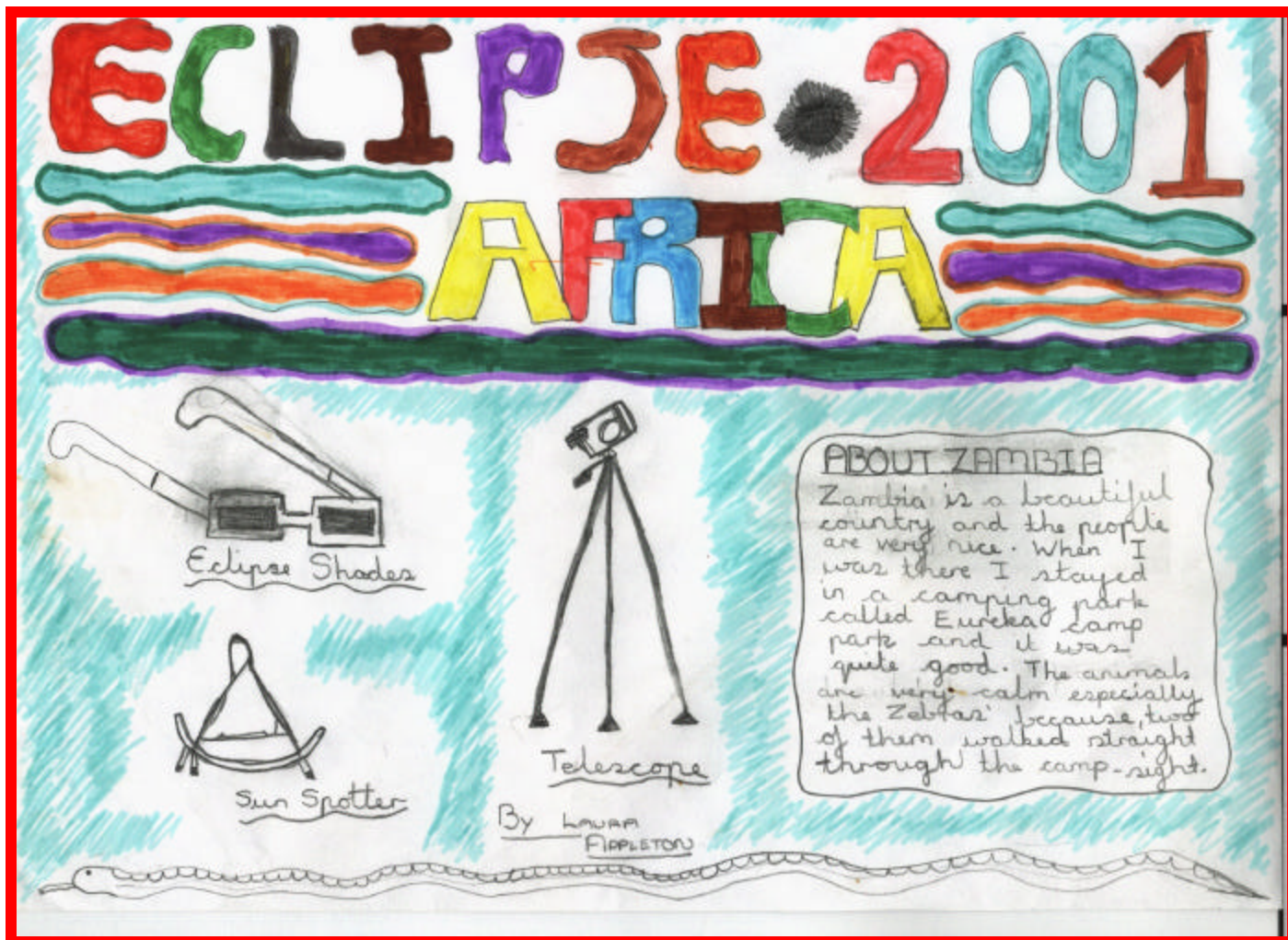
Photography contest <http://nacion.com/dominical/2002/febrero/10/dominical8.html>

Hope you enjoy them. We continue to plan a trip to the Annular in Mexico in June. Hope to see some of you there. Clear Skies, Alejandra

Seasons Greetings Card from Valentin and Rita Kinet

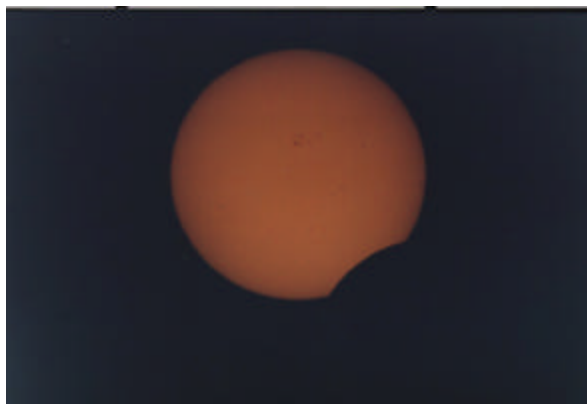


## ASE 2001 + TSE 2001



Eclipse Drawing by Laura Appleton (11 years)

Partial eclipse of 14 December 2001 by Derryl Barr (North Platte)



# ASE 2002

## Eclipse Weather Predictions

From : Assoc Prof J R Huddle <huddle@usna.edu> To : SOLARECLIPSES@AULA.COM Date : Thu, 14 Feb 2002 14:06:07 - 0500 (EST)

I just came across this site by accident. I don't recall seeing it mentioned in this forum, so please forgive me if this note repeats information you already know. Jay Anderson's predictions for the solar eclipses of 10 June and 4 Dec 2002, and for the November 2000 Leonid meteors may be found at <http://home.cc.umanitoba.ca/~jander/>. Best Regards, Jim Huddle

## Deluxe hotel room to share in PV

From : olivier.staiger@span.ch To : SOLARECLIPSES@AULA.COM, Daniel Fischer <dfischer@astro.uni-bonn.de> Date : Thu, 28 Feb 2002 17:35:41 +0100 (CET)

howdy all, I will arrive in PV saturday June 8 on AA (Alaska Airlines, not Alcoholics Anonymous ;-)) from LAX, at 14:33 and will leave June 11 with Alaska Airlines at 7:10 PM back to LAX.

I have booked a double room at the Intercontinental Presidente hotel, at 200\$ per night , including all meals and tax. Thus I can share that room with one person (non-smoker please. Drinker welcome :-), for 100\$ per night. It is not cheap, I know.... but you only live twice ! ;-)

## 2002 eclipse trips

From : MrEclipses@aol.com To : SOLARECLIPSES@aula.com Date : Tue, 26 Feb 2002 07:09:45 EST

Greetings Eclipse Chasers - This is a brief message just to inform you of three eclipse trips I'm helping to organize through Spears Travel for 2002.

The three trips are as follows:

Puerto Vallarta, Mexico (June 2002 annular eclipse): June 7-11, 2002  
<http://www.spearstravel.com/mexico.htm>

South Africa (December 2002 total eclipse): Nov. 24 - Dec. 5, 2002  
[http://www.spearstravel.com/africa\\_2002.htm](http://www.spearstravel.com/africa_2002.htm)

Australia (December 2002 total eclipse): Nov. 29 - Dec. 6, 2002  
[http://www.spearstravel.com/australia\\_2002.htm](http://www.spearstravel.com/australia_2002.htm)

I won't use any bandwidth on the trip details. If you are interested, please check the above web sites and/or contact me privately.

I will be traveling to South Africa in March to make arrangements for the December eclipse. I'll post any relevant information this trip on the SEML after I return. Clear skies, Fred Espenak

From : Evan Zucker <ez@AbacusTotality.com>

I'm interested in this trip, but I'm concerned about the weather prospects. From what I've read, and from what I recall from my 11 July 1991 planning, there's a pretty good chance for clouds in the vicinity of your planned observing site.

Jay Pasachoff and I have discussed the possibility of renting a boat out of Cabo and sailing south in order to maximize the chance of clear skies, both because of better weather prospects and mobility. However, renting a boat for that type of journey is probably easier said than done, and safety would obviously be a concern. Evan H. Zucker San Diego, California

A  
S  
E  
  
2  
0  
0  
2

From : "barr derry" <dbarr@nque.com>

Evan: I too have given consideration to the renting a boat at Cabo and sailing south into the path of annularity. Certainly skies seem to clear up as one moves westward off the coast of mainland Mexico, and the area south of Cabo should be much clearer. Also like you I have pondered the safety issue. But my decision to attempt to observe the eclipse from the PV area is based solely upon the conclusion that my Cabo considerations are the seeking of a "total eclipse" solution to an "annular eclipse" problem. While cloud certainly destroys the subtle features of a total eclipse, the "scattered to broken" clouds that seem common in the Puerto Vallarta area in June could range from a fatal inconvenience to a dramatic enhancement of the overall annular eclipse experience. (Hopefully by saying that I have not damned the whole PV area to be completely cloud enshrouded!)

Personally, I do not see the ring of annularity in this eclipse as being narrow enough to expect much hope for the display of features such as prominences and the inner corona that are normally associated with totality, especially as far east in the eclipse pattern as we will encounter the shadow at a point south of either Cabo or PV. The fact that the observing platform south of Cabo must be a small craft subject to the toss and caprice of the sea further reduces any hope of successful observation or capturing photographically of these unlikely features.

The best that an observer, I feel, can hope for in the upcoming eclipse situation is to capture either visually or photographically the conjunction of the sun and moon mingling with the features of our own world. Certainly a few clouds (if they behave themselves!) can play an interesting supporting role in this upcoming eclipse drama.

Therefore, I suggest that you, Evan, and any other SEML member still undecided regarding an observing location, join the large number of us already committed to Puerto Vallarta. As an ace in the hole, to hold out against the always present prospect of being clouded out, we could perhaps begin to make arrangements for a grand meeting where we can either all jointly celebrate the wonder of the event that we witnessed, or for consolation, cry in our beer, and most certainly make our plans for future eclipses. Please give it some thought.

From : Evan Zucker <ez@AbacusTotality.com>

> But my decision to attempt to observe the eclipse from the PV area is based solely upon the conclusion that my Cabo considerations are the seeking of a "total eclipse" solution to an "annular eclipse" problem.

That's a clever way of putting it.

> While cloud certainly destroys the subtle features of a total eclipse, the "scattered to broken" clouds that seem common in the Puerto Vallarta area in June could range from a fatal inconvenience to a dramatic enhancement of the overall annular eclipse experience.

Your point is well taken. However, I have some personal experience observing sunset annular eclipses because I live in San Diego and we had one here on 4 Jan 92. The entire Los Angeles area was clouded out, but in San Diego we had scattered to broken clouds on the western horizon. While there were some dramatic photos, there were also plenty of mostly obscured photos (see the right-hand photo at <http://www.lpl.arizona.edu/~vance/www/eclipse.html>). I can tell you that I would have enjoyed the experience a lot more if the sky had been clear.

Jay Pasachoff and I were so concerned about the clouds in mid-afternoon that we rented several small planes I had reserved, and we and our families observed the eclipse from about 10,000 feet above the Pacific Ocean, where the clouds were just as bad as on the ground.

> Personally, I do not see the ring of annularity in this eclipse as being narrow enough to expect much hope for the display of features such as prominences and the inner corona that are normally associated with totality,

There was no possibility of seeing those effects in 1992, but that was only a 90% eclipse at sunset. This year's eclipse will be 98% at sunset. However, I still wouldn't expect to see any "totality" effects, even if the sky is clear, because of the dimming caused by the thick atmosphere at sunset.

> The fact that the observing platform south of Cabo must be a small craft subject to the toss and caprice of the sea further re-



A  
S  
E  
  
2  
0  
0  
2

duces any hope of successful observation or capturing photographically of these unlikely features.

But I would expect that it wouldn't be a problem photographing the "ring of fire" from a small boat because you would be using a relatively high shutter speed, depending upon the film.

> The best that an observer, I feel, can hope for in the upcoming eclipse situation is to capture either visually or photographically the conjunction of the sun and moon mingling with the features of our own world.

I thought the best photos from 1992 showed just the ring of fire and the ocean, although the clouds were necessarily included, such as [http://www.skyscapes.com/Shadows%20in%20the%20Sky/075M\\_Annular\\_Eclipse\\_at\\_Sunset.jpg](http://www.skyscapes.com/Shadows%20in%20the%20Sky/075M_Annular_Eclipse_at_Sunset.jpg) (taken by my friend Dennis Mammana, who until recently was the resident astronomer at the Reuben H. Fleet Science Center) and <http://www.ccnl.emory.edu/greg/images/eclipse.jpg>.

Here's a nice sampling of those and other photos: <http://images.google.com/images?q=annular+eclipse+1992&hl=en>

However, I quite agree that some of the beach and palm tree photos were quite good, such as <http://www.skyscapes.com/Shadows%20in%20the%20Sky/Shadows.htm>.

Here are some other wonderful photos of this eclipse and others by Dennis: <http://www.skyscapes.com/Shadows%20in%20the%20Sky/Shadows.htm>

>Therefore, I suggest that you, Evan, and any other SEML member still undecided regarding an observing location, join the large number of us already committed to Puetro Vallarta.

That's a good suggestion. The only catch for me is that I can't spare more than a day or two for the trip because I already have two lengthy vacations scheduled this year to Hawaiï and Alaska and I just returned from a week-long trip to the Olympics. (Yes, I know -- it's a hardship <g>.) Fortunately, San Diego is relatively close to PV, and so I'm looking into a quick there and back flight, staying perhaps one night.

The good news is that even if I don't go, San Diego will get the deepest partial eclipse of anywhere in the United States -- 74% obscuration at 6:24 PM PDT with the sun 17 degrees above the horizon. The eclipse ends when the sun is about 5 degrees above the horizon. Evan H. Zucker San Diego, California

From : olivier.staiger@span.ch

> I thought the best photos from 1992 showed just the ring of fire and the ocean, although the clouds were necessarily included, such as [http://www.skyscapes.com/Shadows%20in%20the%20Sky/075M\\_Annular\\_Eclipse\\_at\\_Sunset.jpg](http://www.skyscapes.com/Shadows%20in%20the%20Sky/075M_Annular_Eclipse_at_Sunset.jpg)

very nice indeed. by the way, in case of just "a little clouds", but just too much so you don't see it anymore with your eyes, if you have a Sony handycam with Infrared "nightshot" filter/beam, try it ! You can film the Sun thru clouds when visually you can't see it anymore. Picture will be b/w with greenish hue, but that can be corrected later on the computer (or take it right away in b/w)

I wonder : has anybody ever tried to take a PHOTO of a solar eclipse through clouds - with a b/w INFRARED film ? Would be worth a try having one at hand on June 10. Imagine : everybody is clouded out, nobody sees the ring, but you got it on film anyway ;-) Klipsi

From : MrEclipses@aol.com

>I'm interested in this trip, but I'm concerned about the weather prospects. From what I've read, and from what I recall from my 11 July 1991 planning, there's a pretty good chance for clouds in the vicinity >of your planned observing site.

>

>Jay Pasachoff and I have discussed the possibility of renting a boat out >of Cabo and sailing south in order to maximize the chance of clear skies, >both because of better weather prospects and mobility. However, renting a boat for that type of

A  
S  
E  
  
2  
0  
0  
2

journey is probably easier said than done, and safety would obviously be a concern.

I agree with the above information. Nevertheless, we will take our chances from land because it offers better conditions for photography.

I'd estimate the chances of observing prominences or inner corona (without special optical aids) as somewhere between ziltch and nada (please forgive the technical jargon)! Still, the chance of seeing annularity on the horizon should be stunning. - Fred Espenak

From : Glenn Schneider <gschneider@mac.com>

Most "IR" emulsions for the consumer market (such as you might use in a 35mm or roll-film camera), and even most specialty "sheet" films do not extend very far into what we think of as the near-IR (and not at all into the mid or thermal IR). For example Kodak's HSI (High Speed Infrared) 4143 (cat # 171 3015 & 171 3056 for 4x5 and 8x10 sheets, respectively) loose sensitivity longward of about 0.9 microns. That is in the very short wavelength end of the near-IR, but you won't be able to image through clouds of any significant optical depth with it. It WILL penetrate through haze and light fog, which might help for misty over-water conditions, though.

For those who might want to try it, MACO IR 820c is sensitive up to 0.82nm (near the "r" band for those who do astronomical photometry or photography) and is available in 35mm, 120 and larger sheet format. Also, I can suggest Kodak Aerographic IR 2424 film which is very panchromatic from the UV though the optical to the near-IR out to 0.9 microns. Probably a very good choice is Kodak Aerochrome II 2443 or SO-134 which are "false color" reversal films. These require AR-5 processing (using EA -5 chemistry). I have used this product (but not for eclipse photography) and it behaves as described by kodak in their technical publication: <http://www.kodak.com/US/en/government/aerial/technicalPubs/tiDocs/ti2161/ti2161.pdf> and can recommend it - you probably need to special order it.

For more a more commonly available "color" emulsion (which can give interesting results for non-eclipse photography) you may want to experiment with Kodak Professional Ektachrome IR (with near-IR sensitivities in the 0.7-0.9 micron range).

Three comments:

(1) to improve the near-IR contrast against the polychromatic background (since "IR films" also have sensitivity at visible wavelengths) use an IR filter such as an 87, 87B or 87C. Note that these filters do not transmit visible light, which can make "through the lens" focusing a bit tricky, and they don't overlap in transmissivity with may "solar filters" if used in parallel...

(2) Many camera lenses are well corrected for "chromatic aberration", i.e. variation in focal distance with wavelength, in the visible, but fall short in the near-IR. So, when your lens is focused at "infinity" an image taken at 0.8-0.9 microns will be slightly defocused. Probably not a problem if your f/ratio is slow enough so you have sufficient depth-of-field to compensate, but you may want to make sure you can do "par focal" imaging for fast optics. With a telescope of course you can, but make sure you know where best focus is for wavelength you are photographing at.

(3) Light meters in cameras are calibrated for visible wavelengths. If you are doing "spot" metering (in particular), but really any light-metering in-camera by relying on a films ISO rating you likely will have VERY overexposed images in filtered near-IR pictures. The best "calibration"? Test it BEFORE the eclipse with your lens/film choice, AND sun low on the horizon.

Maybe I'll see you in P.V.? I'll be the one with the NICMOS\* tee-shirt on... If launch/rendevous/grapple and EVA -5 goes well for \*TOMMOROW'S\* scheduled STS-109 mission... Cheers @ T-1 day,

From : Daniel Fischer <dfischer@astro.uni-bonn.de>

Yeah, let's get together in Puerto Vallarta! To make a start, I will herewith disclose my flight details (just made the booking today):

I'll be arriving in Puerto Vallarta on June 7 at 15:39 (on AA 319 from Dallas Ft Worth) and will be leaving on June 11 at 16:55 (on AA 322 to Dallas Ft Worth) - the Texas connection allows me to attend the American Astronomical Society meeting in Albuquerque the week before and get the eclipse as a (relatively) inexpensive bonus.

## ASE 2002

It would be great if hotel rooms and rental cars could be shared in an efficient manner among SEML members with roughly the same itinerary - I'm open to every option here, including the much-discussed boating idea. Daniel Fischer (Germany)

## TSE 2002

### 2002 Dec 4 eclipse maps through South Australia

From : Fraser Farrell <fraser@trilobytes.com.au>

To all, I've had many many enquiries from people wanting to know more about the local conditions in South Australia; including Where Places To Be Eclipsed Are Located....

Evidently some of you are working from a typical "Atlas of the World" view of our sunburnt country; and almost none of you have the large scale topographic maps that you can buy from our government mapping agency AUSLIG ([www.auslig.gov.au](http://www.auslig.gov.au)).

Therefore, to fill in this gap in knowledge, I have drawn the eclipse path onto my well-used copy of the touring map of the SA Outback. The original is from our local motoring association (<http://www.raa.net>). Copies should be available from all Australian motoring / touring associations too.

The resulting map mosaic is online at: <http://www.trilobytes.com.au/astronomy/2002/eclipse.htm>

This shows you all the significant roads, towns, distances, fuel availability, etc for the region to be traversed by the eclipse.

Additional local info will appear at this URL, once I have distilled out the essentials of all the zillions of emails I've already written on this topic! ;-) cheers, Fraser Farrell

### Oddments of accommodation

From : "Patrick Poitevin"  
<patrick\_poitevin@hotmail.com> To : SOLAR-  
ECLIPSES@AULA.COM Date : Fri, 22 Feb 2002  
18:08:22 +0000

From: "Janita V Hill" <janita@picknowl.com.au>  
A few more oddments of accommodation found  
for the South Australian eclipse in December.  
(Maxine is a Society member, not a profession  
tour organiser). cheers, Janita

Dear Jan, would you like to tell your eclipse group  
that I have available a self-contained flat Bed and  
Breakfast at Andamooka. Interested parties can  
email me. Also Andamooka Caravan Park (trailer  
park) has plenty of powered sites still unbooked  
plus unpowered tent sites. Luv from Maxine

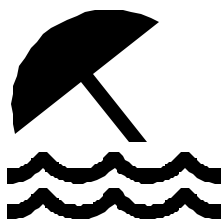
oliri@ozemail.com.au Greetings from Adelaide  
Maxine and Michael's home page is <http://ching.apana.org.au/~oliri>



T  
S  
E  
  
2  
0  
0  
2**So. Africa Data Mission**

From : Vic & Jen Winter  
<webmaster@icstars.com> To : SOLARECLIPSES@AULA.COM Date :  
Mon, 25 Feb 2002 03:49:52 +0000

Hello all, Vic and I are leaving for South Africa on Tuesday (Feb 26) for a site inspection and will visit areas within South Africa to include Johannesburg, Messina and Kruger Park areas. If anyone would like us to gather or convey any specific data or information on their behalf, we hope you will let us know before we leave. Clear Skies, Jen Winter - Owner

**Going to Woomera**

From : "Janita V Hill" <janitah@senet.com.au> To :  
<SOLARECLIPSES@AULA.COM> Date : Fri, 1 Feb 2002  
11:15:25 +1030

This is from our local Astronomical Society chat line: Re: eclipse viewing 4th December '02

"I have been in contact with the relevant parties at Woomera and they have informed me that they are going to have one area only for viewing as they are expecting a thousand plus people. They will have security in place and toilets etc. The Department of Defence is going to charge people for access onto the Woomera Prohibited Area. They have not yet decided on the price but it will not be a token amount! Thought you would like to know this to aid in your planning. There is no public accommodation left at this stage.... Virgs"

(Virgs was a local in Woomera for a few years.) via Janita Hill, South Australia

From : "Chris Malicki" <kmalicki@idirect.com>

Any information about the exact location of the viewing area, availability (i.e. first come - first served?), need for reservation to the site, where to get more info etc.? Chris Malicki

**Eclipse weather for 2002**

From : Jay.M.Pasachoff@williams.edu To : SOLARECLIPSES@AULA.COM Date : Mon, 11 Feb 2002

Could someone please summarize for me what the actual weather was at eclipse time in both Ceduna, Australia, and Messina, South Africa, for the week or two around December 4 two months ago, that is, a year prior to the eclipse? Jay Pasachoff

From : "Joseph Cali" <joe\_cali@hotmail.com>

Dec 4th was cloudy in Ceduna. observation window between 27 Nov & 12 December - there were 9 clear and 6 cloudy days at Ceduna based on vis band satellite images.

More importantly the southern oscillation index(SOI)\* was quite -ve this year indicating a wetter than normal summer. Living in Southern Australia I can vouch for the fact that it certainly was. Our normal rainfall here in Canberra over summer is usually nil. This year it rained a little in December and quite a lot over the last few weeks. September-April is drought season in the south East. The SOI should head towards +ve territory over the coming years and we should expect next Summer to be drier than this summer. Having made that statement, it will certainly make a liar of me come December.

regards Joe Cali

\*Terminology - SOI and Western Pacific Warm Pool

SOI is a ratio of ocean temperatures between the western pacific warm pool and south east Asia. It is an indicator of drought in Australia. +ve indicates drought conditions.



T  
S  
E  
  
2  
0  
0  
2

The Western Pacific Warm Pool is a body of warm water near Samoa that has been suggested as a major forcing factor driving the worlds weather systems.

From : "Katherine Low" <klow@skynet.be>

Hello Jay, Please have a look at the Africlipse web site of P. Tiedt. at URL [http://www.eclipse.za.net/html/2002\\_wx.html](http://www.eclipse.za.net/html/2002_wx.html)

This shows the satellite photos of Southern Africa for the period 10-Nov-2001 to 20-Dec-2001. It looks like there were some clearings on 4-Dec but difficult to say on this map without border lines or totality path where exactly. Overall, also the days before and afterwards, it did not look very good in 2001 (all photos at 06:00 AM UTC). But what does that mean for 2002? As the famous saying goes: 'climate ....' Regards, Kris Delcourte

From : "Mick Wolf" <mickwolf@picknowl.com.au>

Hello Jay, here is some information on the weather in Ceduna, South Australia between 28/12/01 to 11/12/01.

Date	Max temp.in deg. C.	Cloud cover(6am)	4pm	6pm
28/11/01	23.4	3/8	4/8	
29/11/01	24.5	1/8	3/8	
30/11/01	20.9	4/8	3/8	
1/12/01	29.6	4/8	6/8	
2/12/01	21.6	7/8	6/8	
3/12/01	21.0	7/8	2/8	
4/12/01	24.8	4/8	8/8	
5/12/01	20.3	8/8	8/8	
6/12/01	25.5	4/8	4/8	
7/12/01	20.0	6/8	3/8	
8/12/01	20.7	3/8	8/8	
9/12/01	20.0	6/8	4/8	
10/12/01	20.1	5/8	2/8	
11/12/01	20.1	2/8	2/8	

Please note that November and December last year were the coldest and wettest for about 60 years. WE were in Ceduna in mid December 1972 when the temperature reached 51 deg. C. Further inland the temp. is usually a few degrees higher. With regards Mick Wolf.

Ilam sundial



T  
S  
E  
  
2  
0  
0  
2**Hole in the Sky Tours 2002 Eclipse Knus**

From : "eclipse98" <eclipse98@earthlink.net> To : <patrick\_poitevin@hotmail.com> Date : Mon, 25 Feb 2002 17:49:10 -0800

Hole in the Sky Knus: 2 trips planned for the December 4, 2002 Total Solar Eclipse

Dear Eclipse-o-phile, We are pleased to announce two trips for this year's total solar eclipse. You can enjoy the eclipse in the early morning on the Marco Polo cruise ship, off the southern coast of Africa, or a sunset eclipse in the Outback of Australia!

The cruise begins with a three day safari in Kenya and then visits Zanzibar, Madagascar and four ports in South Africa, Richards Bay, Durban Part Elizabeth and beautiful Cape Town. The Marco Polo will serve as our floating hotel for our 3 day visit to Cape Town.

The Australian eclipse tour will begin in Sydney with stops in Adelaide, Kangaroo Island and the dramatic outback area of Flinders Ranges for the eclipse. This tour features an incredible diversity of geography and culture. To learn more about our eclipse tour options please visit our web page: [www.holeinthesky.com](http://www.holeinthesky.com). While you are there, take a look at the wonderful pictures and stories from last years total solar eclipse. Make plans now to join us as we once again, stand in the shadow of the moon! Clear Skies, Jerry Levy President, Hole in the Sky Tours

**SOUTH AUST ECLIPSE INFO/DATA/MAPS**

From : "Odille Esmonde-Morgan" <analog6@ozemail.com.au> To : <SOLARECLIPSES@AULA.COM> Date : Sun, 3 Feb 2002 10:14:58 +1100

Dear All, I have found some more detailed maps of the SA area of the eclipse at [http://www.atnf.csiro.au/asa\\_www/info\\_sheets/eclipse2002.html](http://www.atnf.csiro.au/asa_www/info_sheets/eclipse2002.html). These are prepared by Martin George of the Launceston Planetarium, and I thought they might be useful to those planning trips. The full page here gives good advice on local conditions etc and a view of what you can expect to see in the sky during totality.

**Updates to Africlipse Website**

From : "Peter Tiedt" <rigel@stars.co.za> To : "Solar Eclipse Mailing List" <SOLARECLIPSES@AULA.COM> Date : Mon, 4 Feb 2002 17:59:28 +0200

Hi all, I have made some updates to the Africlipse website.

A new page has been added (especially for those who do not yet have firm arrangements) This page will deal with places to stay and things to do - like walking with elephants. see [http://www.eclipse.za.net/html/2002\\_w2s.html](http://www.eclipse.za.net/html/2002_w2s.html) There are also some new tours on the 2002 Tours page. [http://www.eclipse.za.net/html/2002\\_tours.html](http://www.eclipse.za.net/html/2002_tours.html)



Main Page: <http://www.eclipse.za.net> Regards Peter Tiedt

**South-Africa Eclipse chasers be aware of name changes**

From : "Katherine Low" <klow@skynet.be> To : <SOLARECLIPSES@AULA.COM> Date : Sun, 17 Feb 2002 19:15:33 +0100

Hi, Pls find a message for the South-African eclipse chasers. I just read in Belgium newspaper De Standaard, that from mid-Feb (somewhere around this moment) place names in the Northern Province (of the eclipse path) are going to change. Actually the Northern Province does not exist anymore and is now called Limpopo (named after the river at the border of S. Africa with Botswana and with Zimbabwe).

Most of the colonial names from Afrikaner origin are going to be (or are already) renamed. The capital of Limpopo will no longer be Pietersburg but Polokwane, Potgietersrus will be called Mokopane. Other names with familiar meaning for Dutch speakers from Belgium and the Netherlands will disappear: Soekmekaar, Hoedspruit, Nylstroom, Duivelskloof, etc. Also the town Messina will get a new name. The article does not say what name. Just be warned and make sure you find your way (in due time). I wonder whether all road and sign posts will be updated. The best thing to do is to buy a most up to date map when you arrive in S. Africa. Street names will also be renamed in the Limpopo province. Good luck! Kris Delcourte

From : "Katherine Low" <klow@skynet.be>

More complete information on the name changes in the north of S. Africa:

Extracted from <http://www.gov.za/>

T  
S  
E  
  
2  
0  
0  
2

Northern Province name changes

14 February 2002

The Premier of the Northern Province, Ngoako Ramathlodi, announced the following name changes during the official opening of the Provincial Legislature on 14 February:

\* Northern Province will be known as Limpopo. (To allow for the necessary amendments to the Constitution, the name has been submitted to Parliament.)

\* Warmbath is now Bela-Bela

\* Nylstroom is Modimolle

\* Potgietersrus is Mokopane

\* Pietersburg is Polokwane

\* Messina will be known as Musina

From : "Peter Tiedt" <rigel@stars.co.za>

Thanks Kris for those links. For those coming to SA, don't worry too much - the old names will still be around for quite a while - certainly well into 2003. Old habits die hard, and Pietersburg will remain Pietersburg, even to the locals, for a long time. Regards Peter Tiedt

### NASA 2002 eclipse bulletin on-line

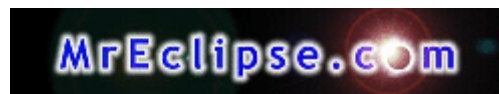
From : FRED ESPENAK <u32fe@lepvax.gsfc.nasa.gov> To : SOLARECLIPSES@AULA.COM Date : Thu, 28 Feb 2002



The html version of the NASA 2002 eclipse bulletin is finally on-line. You can find it at:

<http://umbra.nascom.nasa.gov/eclipse/20021204/rp.html>

Please let me know if you find any bad links. - Fred Espenak



### Post 2002 TSE Kruger Park Visit

From : "Peter Tiedt" <rigel@stars.co.za> To : "Solar Eclipse Mailing List" <SOLARECLIPSES@AULA.COM> Date : Mon, 4 Feb 2002 18:05:51 +0200

Hi List, I am about to confirm all the bookings for the post 2002 eclipse trip to Kruger Park Are there any more takers?

e-mail sent in November is repeated below ..... .../...

There has been quite an expression of interest, both among the group and to me directly for an "semi-organised" post eclipse tour to Kruger Park.

For those visiting Africa for the 2002 eclipse I propose organising the following:

This will not be a tour operator organised trip, but I am prepared to make the KNP bookings on behalf of those who want to join.

Kruger National Park - 4 nights, 5 days

6 December - (afternoon) - Gather at Letaba Camp - central Kruger

6 December - (evening) Informal meet/greet/beer - optional evening Game Drive

7 December - (day) Game Viewing - Olifants, Satara and nWanetsi areas.

7 December - (evening) - barbecue (braaivleis in SA) and eclipse recollections

8 December - (day) travel to Skukuza, game viewing en-route, lunch at Tshokwane Picnic Spot.

8 December - (evening) - al leisure - optional barbecue/restaurant/game drive

9 December - (day) - Game viewing, including Bird Hide, Lower Sabie, Kruger Tablets (optional departure by road or air)

9 December - (evening) - farewell barbecue and 2003, 2005 and 2006 plans.

10 December - disperse by road/air.

This could be flexible and there is no compulsion to have any or all of the above. I see it as a loose arrangement of friends travelling together.

T  
S  
E  
  
2  
0  
0  
2

Those travelling by air - Letaba Camp can be accessed via Phalaborwa which is served from Johannesburg, or charter flights. All car-hire companies are represented. Skukuza Camp is served by its own airport (ex Johannesburg and a few others places), and car hire companies are represented at Skukuza.

If travelling by road, enter Kruger at either Phalaborwa (50km to Letaba) or Orpen (116km). Punda Maria is possible, but is a long drive to Letaba (~190km).

Any 4/5 seater sedan vehicle is OK. Sharing of vehicles could be an option - I will co-ordinate if there is a demand. For those who want to share, VW Kombis are available at Skukuza and Phalaborwa and seat 6 in comfort.

Accommodation: Letaba has a full range of bungalows (single room with shower/toilet), huts (single room with shared ablutions) and cottages (multi bedroom with shower/toilet). Also a magnificent elephant museum / exhibition

Skukuza has the same, except the huts are replaced by safari tents. Skukuza is the park headquarters. Also has a golf course for those who want an esoteric golf experience, as well as a magnificent library and other sights of historical interest.

Both camps have a shop, restaurant, filling station, and fast food facility. Each accommodation unit has its own barbecue facility, and all linen including towels are supplied.

The best game viewing in KNP is in the area between Letaba and Skukuza.

Please remember that school holidays (our summer holidays) begin on 6 December and Kruger will fill up rapidly after that date. I therefore propose having a first close about 20 December, although I will make bookings as and when they come in, and advise the costs to be paid direct to Kruger to secure the booking. Payment is usually required by KNP within 30 days of booking.

Rates are in the order of (all in US\$ - about US\$1 = ZAR 12) These could be slightly out

Huts - 1 - 2 persons \$15, plus \$5 per additional person up to 4 per night

Bungalows - 1 - 2 persons \$30, additional \$10 per person per night up to 4

Cottages - 1 - 4 persons - \$60, additional \$15 per person per night up to 6

All these rates are room only.

If I have left anything out, yell direct to me and I will do my best to answer.

Please reply off list to [rigel@stars.co.za](mailto:rigel@stars.co.za) and put "KNP2002" in the subject line please Peter Tiedt

### Africlipse Map error

From : "Peter Tiedt" <[rigel@stars.co.za](mailto:rigel@stars.co.za)> To : "Solar Eclipse Mailing List" <[SOLARECLIPSES@AULA.COM](mailto:SOLARECLIPSES@AULA.COM)> Date : Thu, 28

Hi all, Please note that I have discovered an error on the maps TSE2002-3A.jpg and TSE2002-3A-600.jpg which are accessed from the 2002 Maps page of the Africlipse website. These maps cover the detailed path through the Chobe National Park in Botswana. Page in question is [www.eclipse.za.net/html/2002\\_maps.html](http://www.eclipse.za.net/html/2002_maps.html) The error is not of my making, but is because the published lines of longitude on the printed version are displaced by about 50km. The error is in the order of 28' eastwards.

I have replaced the map (600 pixel wide as well as a full scan) with new versions from a different publisher - using the same file names, so just download the replacement versions and save over the existing incorrect version. Scale on the new versions is 1:560000 The error is regretted and I have reported it to MapStudio. Also see the new page on the Africlipse site - [www.eclipse.za.net/html/2002\\_w2s.html](http://www.eclipse.za.net/html/2002_w2s.html) This page details various places to stay in and near totality. I have also added a few new tours to the 2002 Tours page. see [www.eclipse.za.net/html/2002\\_tours.html](http://www.eclipse.za.net/html/2002_tours.html)

T  
S  
E  
  
2  
0  
0  
2**Weather (and Politics) in Southern Africa**

From : "Cliff Turk" <cliffturk@yebo.co.za>

To : "Solar Eclipses List" <solareclipses@aula.com> Date : Thu, 31 Jan 2002 09:59:29 -0000

Hi All, Living in South Africa and having relatives in Zimbabwe, we probably get a better picture of Zim than most of you.

My choice of location for the December 4 eclipse would be Plumtree, except for the possible political situation - and that applies to any location in Zim. Until the March election is over, we just don't know how things will develop. Regardless of who wins, the supporters of the other side will not be happy and anything could happen in the present environment of lawlessness in many areas. This problem could easily spread to other parts of the country - but on the other hand everything could die down and any sign of problems could vanish.

My advice is wait until the end of March and see what happens. I know that is taking a chance on late bookings, but I don't see any more sensible action to take.

Incidentally, the eastern end of Caprivi would be my second choice, but I shall probably end up in northern South Africa. In all these places, the mornings are usually reasonably clear and the rain only arrives in the afternoons by which time I hope to be well on my way back to Cape Town for a conference due to start the following morning. Cliff Turk

From : "Barrie W. Jones" <b.w.jones@open.ac.uk>

Peter, Thank you for this. I can confirm that the Zambezi Motel in Katima Mulilo is not on our itinerary!

To pick up on Jim Huddle's comment, I have also heard from Richard Fleet (who lived for years in Zimbabwe) and others that early mornings (at the time of totality) are relatively clear in the Caprivi/Botswana/Zimbabwe part of the eclipse track. (Presumably this is also the case for South Africa too.) Barrie

From : Daniel Fischer <dfischer@astro.uni-bonn.de>

The Caprivi region is dangerous for travellers at times - everyone planning to go there should get up-to-date information on the security situation, e.g. [www.auswaertiges-amt.de/www/de/laenderinfos/laender/laender\\_ausgabe\\_html?land\\_id=118&type\\_id=4](http://www.auswaertiges-amt.de/www/de/laenderinfos/laender/laender_ausgabe_html?land_id=118&type_id=4)

-  
for certain roads it is recommended to join convoys protected by the military. Doesn't sound like a good place to set up telescopes in the middle of nowhere ... Daniel

From : Jay.M.Pasachoff@williams.edu

My wife and I had a nice couple of hours in Namibia on the Caprivi Strip in a speedboat from Chobe game park in Botswana after the eclipse last June. But that was on the border. I agree with the note that security may well be a problem elsewhere. Jay Pasachoff

From : "Peter Tiedt" <rigel@stars.co.za>

Hi list, The convoys referred to by Daniel are those that travel where the Namibian border skirts the Angolan border towards the western end of the Caprivi Strip. The eastern end is quite safe, as proved by this e-mail.

I travelled extensively in the eastern Caprivi as recently as October 2001 (with my partner) and we had absolutely no problems.

In the eclipse zone - expect no problems. Peter Tiedt

From : Marc Weihrauch <marc.weihrauch@student.uni-halle.de>

(Continued on page 34)



T  
S  
E  
  
2  
0  
0  
2

Dear eclipse chasers,

> To pick up on Jim Huddle's comment, I have also heard from Richard Fleet (who lived for years in Zimbabwe) and others that early mornings (at the time of totality) are relatively clear in the Caprivi/Botswana/Zimbabwe part of the eclipse track. (Presumably this is also the case for South Africa too.)

So far for an ordinary day. But how will the decrease of solar radiation during the first partial phase affect cloud formation? Will the cooling result in less humidity rising to higher altitudes or in more condensation? Will it defer or forward cloud formation? Best regards Marc

From : Mike Murphy <vmurph@zetnet.co.uk>

Here are two web addresses that might be useful to those of you whose newspapers perhaps don't cover foreign affairs very well:

BBC news, Africa <http://news6.thdo.bbc.co.uk/low/english/world/africa/default.stm>

United Nations Integrated Regional Information Network - Southern Africa [http://www.irinnews.org/frontpage.asp?SelectRegion=Southern\\_Africa](http://www.irinnews.org/frontpage.asp?SelectRegion=Southern_Africa)

You can also get quite good web pages of each country's news papers and a good URL to find these from is: <http://www.misanet.org/news.html> Happy eclipse trip planning. - Mike in the UK

From : Jay.M.Pasachoff@williams.edu

To add to the list of African news sources: [www.allafrica.com](http://www.allafrica.com) They did a special eclipse feature for the 2001 eclipse. Jay Pasachoff

From : Mike Murphy <vmurph@zetnet.co.uk>

Correction: the link for the Southern Africa newspapers is <http://www.misanet.org/links/news.html> Sorry about that. - Mike



**2003 Antarctica weather is not too bad at Mirniy**

From : olivier.staiger@span.ch

Glenn, and all:

- the Antarctica weather, off the coast of Mirniy station seems to be , locally, better than everage , in november. Check out [www.astronomicaltours.net](http://www.astronomicaltours.net) , then click on the Antarctica 2003 logo, and then on the link , just below the red text, "new NOAA sat imagery available, click for details".

- the trip is long, granted. 4 weeks of cruise, plus count one week roundtrip flight to South Africa and back from Tasmania. So you'll need 5 weeks vacation. .... Hey, a dream come true ! ;-)

- Antarctica is the number one reason to do this. The Eclipse is "only" a bonus. Sure, you can get a one-week trip to Antarctica at 1/4th the cost. But then, there's no eclipse. And vice-versa.

- flights: it is Croydon travel. [www.antarcticaflights.com.au](http://www.antarcticaflights.com.au) Flights last about 12 hours. 4 hours Australia to Antarctica, 4 hours along the coast, 4 hours back.

- in 1997 I wrote (e-mailed to Quark Expeditions, [www.quarkexpeditions.com](http://www.quarkexpeditions.com) , to ask them if they could plan one of their icebreaker ships to cruise to 60°S, 90° E, on november 23 2003 at 22:30, for the eclipse. Result: yes , we now have a cruise. I would have preferred a 2-week cruise at half the cost, of course. But at least, we have a way to get there. Now come the tough part: find the money ! hehehe..

- [www.astronomicaltours.net](http://www.astronomicaltours.net) is a major partner and representative of Quark Expeditions, promoting this special eclipse cruise.

- I also contacted Croydon Travel in 1997. Never got any reply. They'll probably do it. Most of their non-eclipse Antarctica flights leave from Sydney or Melbourne. Once per year they might have a flight out of Perth. For the eclipse they will have to do it from Perth. If they do it. Prices for the eclipse will probably be double than normal since only one side can see the sun. Unless they do a U-turn during totality then you glimpse it for just a few seconds. First class, where you have your own window just for you and only one other person to share with, will still be very expensive. Right now it is 4000\$ in first class. Next flight, last of this season , is Feb. 10 out of Sydney. And most of all: you won't put your foot on Antarctica ! Seeing Antarctica from air instead of getting to walk on it will make you feel like the astronauts on Apollo 13 who flew around the Moon without landing on the Moon.

- If I have the time and money, I prefer to go for 4 weeks of cruise AND walk Antarctica, get up close and personal with thousands of Emperor Penguins, and take the risk of clouds, rather than airborne eclipse certainty. What the heck, there will be other eclipses.

- 19'000\$ is much, but it is for 29 days of cruise. That comes to 4750\$ per week. 655 \$ per day "only" (darm! that is still quite a lot.... ;-)

- err.. I get seasick. What is the best medicine on the market against seasickness ? ;-) Klipsi

P.S. right now I don't know for sure if I'll be able to get there. It is just a dream, and I am trying to persue my dream. Will it come true ? Who knows. Maybe. Cross my fingers.

From : Evan Zucker <[ez@AbacusTotality.com](mailto:ez@AbacusTotality.com)>

Actually, it would be more like Apollos 8 and 10, which orbited the Moon and were not supposed to land on it (although Apollo 10's lunar module descended to about 50,000 feet). -- EVAN

From : Assoc Prof J R Huddle <[huddle@usna.edu](mailto:huddle@usna.edu)>

(Continued on page 36)

T  
S  
E2  
0  
0  
3

"- err.. I get seasick. What is the best medecine on the market against seasickness ? ; -)"

Used to be scopolamine patches (like nicotine patches, but with scope instead of nic) but now other drugs are preferred. (I think scope can affect performance on some tasks. I think it also can be used as a "truth serum".) Most people get used to the motion and get over their motion sickness in a few days. See your physician about prophylaxis, but also check out this web site - you may find other sites, as well: <http://www.vnh.org/GMO/ClinicalSection/60Motionsickness.html>. Smooth Sailing, Jim Huddle

From : Michael Gill <[eclipsechaser@yahoo.com](mailto:eclipsechaser@yahoo.com)>

> Right now it is 4000\$ in first class.

Just to clarify - this is in Australian Dollars. 4000AUD = 2027US. This is quite a competitive price for a first class seat on a 12-14 hour flight (where you don't get a TSE thrown in!).

> - If I have the time and money, I prefer to go for 4 weeks of cruise AND walk Antarctica, get up close and personal with thousands of Emperor Penguins, and take the risk of clouds, rather than airborne eclipse certainty. What the heck, there will be other eclipses.

I take the opposite view - Antarctica will still be there after the November 2003 TSE, but no future eclipse will exactly replicate the corona/prominences etc., as they will appear on that day. Michael Gill.

From : Glenn Schneider <[gschneider@mac.com](mailto:gschneider@mac.com)>

What is "seems to be. locally. better than average" based upon? Clearly it can't be the hodge-podge of Vis/IR images linked on that site. Indeed you can see a fair amount of cloud in those images - albiet this is not a systematic sample. This is the sort of "small number statistics" which can be very misleading - either way. Was there a link to some local statistically meaningful sample I missed?

Mirny, BTW, has a mean precip of 46mm in November. The catabatic winds flowing down from the high plateau deflect westwardly as they approach the (low elevation) ice/sea interface and can create a pretty strong shear, and mixing, to stir up cloud formation. For an example see this figure:

From : "Olivier \"Klipsi\" Staiger" <[olivier.staiger@span.ch](mailto:olivier.staiger@span.ch)>

if you look closely at Fred's map and the path of totality: the eclipse starts, as usually, in an area where there is "maximum eclipse at sunrise", but the path ends also and still in the area of "maximum eclipse at sunrise", and not "maximum eclipse at sunset" as it usually does. Antarctica really deserves a special mention ! Klipsi

From : "Olivier \"Klipsi\" Staiger" <[olivier.staiger@span.ch](mailto:olivier.staiger@span.ch)>

>Also, does the weather on the ground look THAT good for this one??

we'll not be stuck on ground, but offshore, on a ship, with a certain degree of mobility. Just like the ships around Aruba, Curaçao in 1998. With the advantage of less risk of colliding with other ships during totality ; -) hehehe

Who said "meteo is what you expect, but weather is what you get" ? remember the "fantastic 10% -only risk of clouds" in Iran in August 1999 ? 10% in August is 3.1 days. You need only half a day of clouds to spoil the trip. Some groups in Iran had a hard time. I know of folks in India who had bad weather, despite 70% -or-better chance for clear skies. Remember Costa Rica a few weeks ago ? Everybody went to the "best place". Almost everybody got clouded out. (see <http://eclipse.span.ch/2001ase.htm>, or [www.icstars.com](http://www.icstars.com) ; -) . Mobility is the answer . (okay, okay, a little bit of luck, too ... hehehe) Stay mobile. "Think global, act local." think of global weather patterns, but act to the local system then-and-there. Ever heard of global warming ? El Niño ? This means: don't rely too much on weather statistics based on 100 years of observation. The rules have changed. Klipsi

From : "Olivier \"Klipsi\" Staiger" <[olivier.staiger@span.ch](mailto:olivier.staiger@span.ch)>

T  
S  
E

that's why I still think it will feel like A-13 : plan to land, but don't do it.... more frustrating ! ;-) Klipsi

From : "Dave Balch, The Stay-at-Home CEO" <Dave@DaveBalch.com>

I've always heard that the best cure for seasickness is to sit under a REALLY big tree. ;-)

From : "Olivier \"Klipsi\" Staiger" <olivier.staiger@span.ch>

allright, allright, take a deep breath, relax, calm down.

now...hem... Antarctica 2003 total solar eclipse. we're just one year and a half away from it.

usually, at this timeline, there is 30+ cruises, flights, landtours, hiketrips, surfjourneys, campadventures, unnamedvoyages, driveyourcampingcartototalityvacation, hitchhikethelunarshadowandavoidcloudedoutsyndrometours, to choose from, to see the eclipse.

but for A2003TSE right now, we have only ONE serious travel opportunity, at least I know of. That 4-week 19'000\$-too-much seasickening clouded-out does-it-ever-end drift on a soviet arch. No frenchy Concorde supersonic 24h NewYork-Mirny-NewYork woosh ! No Carnival cruise Fascination "Aruba strikes back". No US-built-B-747 Croydon Antarctic "can't see that ship, too much clouds" flights. ... darn.... let's see what happens next... Klipsi

From : "Olivier \"Klipsi\" Staiger" <olivier.staiger@span.ch>

> What is "seems to be. locally. better than average" based upon?

ALLRIGHT, ALLRIGHT ! you win, my friend.. ;-) sure, I know and I agree: the weather and the eclipse in Antarctica will NEVER, EVER, be like what happened in Baja in 1991, nor Lusaka 2001, and not even Aruba 1998. It's probably gonna be worse than Mongolia 1997, and even worse than Stuttgart 1999....

So let's just forget about Antarctica 2003 and plan for whatever eclipse we have in 2004 .. HEY !!!!

From : Glenn Schneider <gschneider@mac.com>

> - the Antarctica weather, off the coast of Mirny station seems to be, locally, better than average, in november. Check out [www.astronomicaltours.net](http://www.astronomicaltours.net), then click on the Antarctica 2003 logo, and then on the link, just below the red text, "new NOAA sat imagery available, click for details".

What is "locally better than average" based upon? I could not find any statistics to support this linked from that site. What did I miss. The collection of vis and IR images is a hodge-podge and can be very misleading and easily mis-interpreted. "Small number statistics" as we say.

FYI, the mean precipitation at Mirny station in November is 46mm, mostly from cloud condensate/precip not refrozen sublimated sea ice. The catabatically driven winds which flow down from the high plateau deflect eastward at the ice/sea interface near the coast (over Mirny) and can (and do) create a significant amount of both horizontal and vertical mixing. Lots of shear, lots of mixing, lots of cloud.

In Nov->Dec (right at the time of the eclipse) the pack ice is receding at a large rate (making it much better for breaker accessibility closer to the coast) but its pretty thermally unstable as things are heating up. To see what the ice pack typically does see:

[http://www.geosc.psu.edu/~dbr/Antarctica/Sea\\_Ice.shtml](http://www.geosc.psu.edu/~dbr/Antarctica/Sea_Ice.shtml)

For five years of relevant statistics see: <http://www.globalbioclimatics.org/station/an-mirny.html> (this is a pretty weird site, but has some useful information).

where you can also compare this to other stations.

(Continued on page 38)

2  
0  
0  
3

T  
S  
E

FYI - There is a dated, but still useful map at: <http://sung3.ifsi.rm.cnr.it/~dargaud/Antarctica/InfoAntarctica.html> and you can see some coastal stations in the path at the end of the track (relevant to my earlier mailing about the local circumstances in those regions).

> - Antarctica is the number one reason to do this. The Eclipse is "only" a bonus. Sure, you can get a one-week trip to Antarctica at 1/4th the cost. But then, there's no eclipse. And vice-versa.

Well, this is a matter of perspective. It really is inverted for me. The eclipse is the number one reason, and the number two, three, four... The venue is WAY down on the list, probably irrelevant. Actually, I wish it were elsewhere as it is so bloody hard to do this one. Maybe that's just my perspective having worked at the south pole for two seasons - but those priorities are backwards. Not "wrong", as each has his/her own agenda, but just not mine.

> flights: it is Croydon travel. [www.antarcticaflights.com.au](http://www.antarcticaflights.com.au) Flights last about 12 hours. 4 hours Australia to Antarctica, 4 hours along the coast, 4 hours back. {... and other comments on Cryoden}

2  
0  
0  
3

I know their web site - but it still has nothing about the eclipse. And, their "rotation" scheme may work for tourists gawking at the ice, but that won't work very well (actually not at all) for the TSE. An option is to have a limited number of eclipse chasers on the Sun side and sell the rest (to amortize the cost) to ice gawks. That scares me as then the eclipse may not be #1 priority. If one is willing to see that eclipse from further north, i.e., at an elevation of say 5 or 6 degrees, you need to fly a shorter distance. Eg., from Perth airport (31d 57'S, 115d 58'E) to a mid-eclipse intercept at 22h24m the flying distance is 1827 nautical miles (or about 4,200 statute miles "round trip"). There the Sun, if you are at 30,000 feet, is 6 degrees above the astronomical horizon (higher above the depressed horizon), which may seem low but is actually a very respectable elevation (and a convenient one for aircraft viewing) from that elevation. As this is still respectably far from the Antarctic coast (about 10 degrees in latitude), there may be other air charter companies that can do this. I certainly intend to find out. -GS-

From : "Olivier \"Klipsi\" Staiger" <[olivier.staiger@span.ch](mailto:olivier.staiger@span.ch)>

a twin cabin is 25'000\$ p.p. = 50'000\$ for a couple. if 300 listmembers buy a ticket at 167\$ , one lucky winner could go with his / her friend / husband / wife / lover / buddy / mate / unnameit. Would you buy a ticket for 167\$ to try to win a trip for 2 (!) , with a 1:300 chance to win ?

I think yes. And: the nice thing about this is that, honestly, even if I loose, it would still make me feel good , because one of my friends, a member on this list, would be able to go there. He would be our "ambassador". Thanks, in part, of me. What a nice feeling. Klipsi

From : Mike Simmons <[msimm@ucla.edu](mailto:msimm@ucla.edu)>

Well, there is a tiny eclipse going on in 2004 -- the Venus transit of June 8, 2004. While not as spectacular as a total eclipse, it's far more rare and something none of us has ever seen. I'm going to Iran in March and April and will be planning a tour there for the Venus transit. Iran is ideally located for this event (which is more important than a Mercury transit because it lasts much longer) and has great weather prospects. Most of the Middle East will have clear skies but Iran offers a variety of topography and climate for those that don't like sitting in the Sun in 40 C temperatures!

More on my return. The upcoming Iran astronomy/culture/history trip will be on Astronomy.com daily beginning around March 25.

Mike Simmons

Home page: <http://webpages.charter.net/msimm>

Iran page: <http://webpages.charter.net/msimm/Iran>

P.S. My apologies to Patrick if this is too far off-topic on SEML, but with the mention of planning for 2004 I just couldn't resist! I'll check with you when I return about making an announcement about the 2004 trip on SEML.

From : JohnLX200@aol.com



T  
S  
E2  
0  
0  
3

0 degrees is fine, or even negative will work. I wouldn't have them fly any farther than the closest point along the umbral path where the centerline can reach the airplane.

In 1999, my flight had the sun at MINUS 0.2 degrees and all was fine. In my case, the cost to raise it was over \$1300 per degree. (\$5250/hour; 60 nautical miles per degree, each direction; 470 knots true airspeed)

At -0.2 degrees it was very far above the depressed horizon from 41,000 feet despite a cloud layer around 20,000 feet. Another benefit of being "beyond the tangent point" is that the entire path of the umbra was on the same side of the airplane as the eclipse. I haven't looked at the 2003 details yet, but I'm sure there are significant differences from 1999. Namely that the umbra barely cuts in toward the center of the Earth, so from an airplane the shadow would be moving more horizontally than vertically.

Having the eclipse at or below the nominal horizon does make the refraction correction more important, also. But still, I'd go to the closest point with as little as MINUS 0.25 degrees sun elevation, and watch the umbra race across in front of me while watching the contacts and totality. John Hopper

From : "76630,2206" <76630.2206@compuserve.com>

Evan & Klipsi: The 2003 eclipse will be on our eighth wedding anniversary.

During the last three total eclipses, I ran experiments and determined my wife's freezing point as being 24.5 C. This means that if I want to live to see my ninth anniversary, we take the plane.

Patrick & Joanne: Congratulations on your upcoming wedding and good luck thereafter! (I checked into Oppolzer; there are no eclipses on 2 February until a total lunar in 2083. However, I am sure that you will find other ways to celebrate.) cheers/rbs

From : "Joel M. Moskowitz, M.D." <moskowi@attglobal.net>

> Who said "meteo is what you expect, but weather is what you get" ?

It was Joe Rao.

From : Evan Zucker <ez@AbacusTotality.com>

I typically have heard this phrase as, "Climate is what you expect, but weather is what you get."

I realize Joe is known for having said that, but a little research shows that the expression probably pre-dates Joe's first use of it.

For example, NOAA calls this an "old expression." <http://www.oar.noaa.gov/climate>

It also appears to be known worldwide: [www.bom.gov.au/lam/climate](http://www.bom.gov.au/lam/climate)

So far as I can tell, this expression originated with Robert A. Heinlein:

<http://ggweather.com/library.htm>

<http://www.umac.org/climate/>

<http://www.wrh.noaa.gov/tucson/>

A number of web sites attribute this quote to a 1973 book by Heinlein entitled, "Time Enough for Love": [http://www.bom.gov.au/bmrc/clfor/cfstaff/nnn/nnn\\_climate\\_quotes.htm](http://www.bom.gov.au/bmrc/clfor/cfstaff/nnn/nnn_climate_quotes.htm)

<http://www.mindesign.com/lazarus2.html>

<http://www.dan-king.com/squotes.html>

<http://www.spearweasel.com/llog.htm>

You can buy "Time Enough for Love" here: [http://www.amazon.com/exec/obidos/ASIN/0441810764/qid=1012549386/sr=8-4/ref=sr\\_8\\_71\\_4/102-7064386-7986513](http://www.amazon.com/exec/obidos/ASIN/0441810764/qid=1012549386/sr=8-4/ref=sr_8_71_4/102-7064386-7986513)

(Continued on page 40)

T  
S  
E2  
0  
0  
3

As I recall from our days with the Amateur Observers Society in Queens, New York, Joe is about my age, which means he would have been about 18 in when this book was published in 1973. I would guess he picked it up from Heinlein's book or from one of the many other sources that picked it up from Heinlein. Maybe Joe can confirm this for us; I'm sending a copy of this message to him.

[http://www.bom.gov.au/bmrc/clfor/cfstaff/nnn/nnn\\_climate\\_quotes.htm](http://www.bom.gov.au/bmrc/clfor/cfstaff/nnn/nnn_climate_quotes.htm) also has a lot of other great weather quotes, including this similar one by Mark Twain: Climate lasts all the time and weather only a few days. [Mark Twain, English as she is taught] Evan H. Zucker San Diego, California

From : Vic & Jen Winter <webmaster@icstars.com>

Who would have thought that Klipsi's comment / idea about 2003 would stir such a flutter of comments.

I logged on for after 2 days due to power outages after this ice-storm in the midwest. (generator power now) to find this sudden flurry of comments about the date.

There are, perhaps, some items we, on the organizational have that the general list do not. I do not want to sound like a salesman plugging our program, but hope I can share what I have learned.

1: We have been working with the planning staff at Quark for many months now and have exchanged a lot of information. Quark has hired the assistance of the most highly respected experts in eclipse planning and is taking great steps to assure that the voyage be as successful as possible. The ownership of both Quark and Adventure Network International (the main recognized land tourism operator) are the same. We selected the icebreaker option specifically over the land option due to concerns from their planning staff about obstacles in weather preventing passage traversing TO the eclipse path. The ship's 2 passenger helicopters and 4 zodiacs are intended to be facilitated in the event that observers would need to relocate faster over the ice shelf than the icebreaker can navigate.

2: Evan, I'm very sorry, but the program cost starts at \$18,995 per passenger in a triple share cabin. - not for the whole cabin.

3: As of Monday, January 28, 2002 every triple cabin had names reserved - except one triple cabin I have one female traveler in. Therefore in order to secure a spot at that cost, one must either be female or hope for a cancellation of those who have already deposited. We check on these every few days and will know if any open up.

4: There are many tours which inexpensively visit the Antarctic peninsula (near the Falkland islands), however as Klipsi pointed out, the eclipse isn't total there. There is also the issue of the Antarctica Treaty which protects the environment of Antarctica, but requires meeting strict guidelines to be granted permission to set foot on Antarctica. Cruise ships like Holland America do not have this permission, nor does the air carrier, Croydon travel. There is only one company who is experienced in the circumnavigation of the continent and also has permission to land; Quark Expeditions. I would mention that the PART of their circumnavigation scheduled for 2003 which runs November 26-January 10th starts at \$24,550 pp in a triple cabin. The ship is small with few passengers than typical and the operational costs are nosebleed high.

5: Thus far, among those individuals who have requested passage or information about passage on the program, all have been particularly serious eclipse observers. I do not expect that this ship has been or will be booked to passengers who are marginally interested in eclipse viewing.

6: Weather: We sought out all available weather data on Antarctica. We located the resource: <http://www.antcrc.utas.edu.au/avhrr/> who offered many years worth of satellite imagery in archive format for us to download. Obviously, a mere 4 or 5 satellite images will not be an accurate statistical representation. However, this is what we were able to download and had the space on our page to post. Our examination of the satellite led us to feel that of the possible viewing locations, we might prefer the small inlet cove to the left of the Schackleton Ice shelf over other nearby locations. This imagery and other available weather data MUST be examined by those professionals who know how to read weather patterns, and particularly the Antarctic weather. Right now, we are awaiting the return of Mr. Werner Stambach, Quark's Antarctic Expedition leader from the 2001-2 circumnavigational voyage. Meanwhile, we have just learned that a trusted friend and associate from Italy who is an astronomer and meteorologist has just returned FROM Antarctica on a scientific expedition to study weather. We will be posting his report shortly. Once our Italian friend, the ex-

(Continued on page 41)

T  
S  
E2  
0  
0  
3

pedition leader, and trusted expert, Jay Anderson can assess the weather data, we hope to set a plan for an ideal viewing goal and statistical odds for that goal.

I understand that those odds play a great part in the decision to attend the event at all, much less by this method. I suppose that those guests who have already registered are those who are serious about eclipse chasing, but also serious about the opportunity to experience the unusual destination of the expedition.

If members of the group are interested in a lottery for a ticket, we will support the idea in whatever means we are capable. We do NOT wish to be the administrator of such a lottery, as to assure the integrity of such a drawing, but will be happy to work directly with that administrator for the greatest discount we can sponsor, to advertise the lottery to help assure the number of entries is enough; or to hold a space for the project. Clear Skies,

From : "Joel M. Moskowitz, M.D." <moskowi@attglobal.net>

[http://www.bom.gov.au/bmrc/clfor/cfstaff/nnn/nnn\\_climate\\_quotes.htm](http://www.bom.gov.au/bmrc/clfor/cfstaff/nnn/nnn_climate_quotes.htm) also has a lot of other great weather quotes, including this similar one by Mark Twain: Climate lasts all the time and weather only a few days. [Mark Twain, English as she is taught]

Evan H. Zucker San Diego, California

Hi Evan, Well, if Joe doesn't respond, I'll ask him the next time I see him.

From : Glenn Schneider <gschneider@mac.com>

Hi John, et al., Thank you for your comments. I will pre-empt my reply comments with some information of possibly general interest to SEML members. I was not suggesting a point where the solar elevation is appx. 5-degrees out of thin air (no pun intended), but because this IS where the flying distance from Perth is at a minimum.

It is likely premature, for anyone to get any "hopes" up, but using this as a baseline I had contacted several Australian based air-charter companies with an explanatory introductory letter, and pointed them to a "not really intended for the public" web page on my server - but with all the appropriate caveats of \*preliminary\* stamped on it, I'll save a lot of bandwidth here and point you too:

[http://nicmosis.as.arizona.edu:8000/ECLIPSE\\_WEB/ECLIPSE\\_03/ECLIPSE\\_2003.html](http://nicmosis.as.arizona.edu:8000/ECLIPSE_WEB/ECLIPSE_03/ECLIPSE_2003.html)

I am \*hoping\* I get some (or at least one) positive reply to my queers and on-line supplemental information. FYI and others (though some may know and even through first-hand knowledge) in 1976 Ansett airlines DID an eclipse flight out of Perth. And, they are one of the companies I have contacted.

I also just re-queried Cryoden as to some of the questions I noted on the above page, but also if they might be interested in doing this supplementary to their grand Antarctic air tour in which there is an eclipse incidentally happening.

I will most definitely keep this assembled group apprised on any and all information I get through SEML or and/or the above server. Glenn Schneider

From : Evan Zucker <ez@AbacusTotality.com>

He did, in some detail. I'm waiting for his permission to post his response to the list. -- EVAN

From : Evan Zucker <ez@AbacusTotality.com>

Joe has authorized me to post these messages he sent me, which should settle this question:

From: Joe Rao Date: Fri, 1 Feb 2002 09:51:10 EST Subject: Re: [SE] "Climate is what you expect ..." To: ez@abacustotality.com

It is indeed Heinlein who first said it. I had actually first heard the expression from someone who participated in an eclipse expedi-

(Continued on page 42)

T  
S  
E

tion that Glenn Schneider and I ran to Colombia back in 1977. The person who quoted it to me, however, was unable to identify the source. About ten years later when I started writing my 1991 Eclipse Handbook for Sky Publishing, I worked the quote into the weather part of the book. I really didn't think much of it . . . but in one of his 'Ramblings' articles for S&T back in 1991, the late George Lovi in talking about changeable weather patterns ended the article with the quote and attributed it to me. I later told George that the quote did not come from me . . . but he never had a chance to print a correction, since he fell ill soon afterwards and died less than two years later.

Actually, I myself only recently learned that it was Heinlein! In doing research on Arizona weather in advance of my trek there for last November's Leonid shower, I discovered the quote appearing at the top of the Website of the National Weather Service Forecast Office in Tucson, Arizona: <http://www.wrh.noaa.gov/tucson> -- joe rao

From: Joe Rao Date: Fri, 1 Feb 2002 10:02:39 EST Subject: Re: [SE] "Climate is what you expect ..." To: ez@abacustotality.com

I'd also like to stress here that I never purposely ignored Heinlein . . . I simply did not know who was the originator of that quote. Had I known, I certainly would have credited him. As meteorologist Ed Brooks (who wrote the forward for my 1991 book) noted:

"(Joe's) asides are excellent in that they give further detailed information. He was generous in his list of references by including unpublished as well as published papers."

And BTW . . . I once asked Ed (in the early stages of writing the book) if he knew who might have originated the quote and he too drew a blank! -- joe

From: "Joel M. Moskowitz, M.D." <moskowi@attglobal.net>

I stand corrected (actually, I'm sitting down now)



### 2003 Antarctica webcam eclipse

From : olivier.staiger@span.ch To : SOLARECLIPSES@AULA.COM Date : Sun, 24 Feb 2002 05:46:04 +0100 (CET)

dear friends, see <http://eclipse.span.ch/2003.htm#2003tse> where I have a selection of links to webcams in Antarctica. Some of these may be showing a partial eclipse coming November 23 2003 around 23 UT. The most interesting cam is in McMurdo, <http://live7.truelook.com/face/newface.jsp?name=/nasa/mcmurdo> because you can actually zoom in and tilt / pan the cam. So we'll have to check out the cam next november 23 to see if the Sun is in the field-of-view around 23 UT. there are 3 science stations in Antarctica which are within the path of totality: Mirny, Maitri, Novolazarevskaya. Plus a 4th station, Asuka, right on the edge. Does anybody know of a webcam page showing live images from any of these stations ? At Mirny the Sun will be relatively high (almost 14°), while the other 3 stations will have the Sun almost on the horizon. Asuka is Japanese station. I would not be surprised if our Japanese friends do a live webcast from there, as they have done several eclipse webcasts since 1997. Klipsi

From : Madden <iluvex@netacc.net>

I used this camera today for about 1/2 hour. It works quite well and is FAST. madden/rochester

### 2003 Antarctica

From : Glenn Schneider <gschneider@mac.com> To : SOLARECLIPSES@AULA.COM, webmaster@icstars.com Date : Mon, 04 Feb 2002 10:16:53 -0700

Vic & Jen Winter wrote: Who would have thought that Klipsi's comment / idea about 2003 would stir such a flutter of comments.... {snip}

In reviewing the flurry of SEML postings of 2003 I do want to apologize if I seemed brusque w.r.t. the site-seeing opportunity afforded by the 2003 eclipse. If my comments were taken that way it was not intentional. I think Vic & Jen are doing a great service in

T  
S  
E2  
0  
0  
3

working putting together their breaker-based trip for the 2003 eclipse. Having spent two summers at the South Pole (and some time on the way at McMurdo, the Allen Hills, and up on the plateau) I fully understand the motivation to view, if not visit in situ, the "frozen continent". As a matter of practicality I suspect a number (probably the majority) of eclipse chasers have neither the financial resources or the time to do participate in the breaker expedition(s) thus far proposed. And for those who put the eclipse as #1 and a trip to the Antarctic #2, the weather/cloud cover and mobility should be (is) a valid concern. For those willing to accept that risk, and who do have the time/money it is a compelling opportunity. Had I both, and inverted personal priorities, I would certainly embrace the idea of a "personal" rather than "professional" return to the Antarctic. For those who do participate in Vic & Jen's venture, I am sure it will indeed be an unforgettable experience, and I truly wish them (any you) the best of luck for that eclipse!

Glenn Schneider [http://nicmosis.as.arizona.edu:8000/ECLIPSE\\_WEB/ECLIPSE\\_03/CENTERLINES\\_ALTITUDE.gif](http://nicmosis.as.arizona.edu:8000/ECLIPSE_WEB/ECLIPSE_03/CENTERLINES_ALTITUDE.gif) (GS, Laura Kay [also an eclipse chaser], and a friend at the South Pole, flying Craig Small's "eclipse flag", ceremonially amongst the flags of the Antarctic treaty nations. One of the very few places it has flown when not under the path of totality).

From : Glenn Schneider <[gshneider@mac.com](mailto:gshneider@mac.com)>

The referenced link/image was SUPPOSED to have been to: [http://nicmosis.as.arizona.edu:8000/SPOLE1\\_SM.jpg](http://nicmosis.as.arizona.edu:8000/SPOLE1_SM.jpg) -GS-

From : "Olivier \"Klipsi\" Staiger" <[olivier.staiger@span.ch](mailto:olivier.staiger@span.ch)>

no problemo, my friend. I find it constructive criticism. We are in democracy, every opinion is welcome ;-) no offence.

wow ! you have been to Antarctica !!! lucky you, my friend. Klipsi

From : Glenn Schneider <[gshneider@mac.com](mailto:gshneider@mac.com)>

Well, my first year down on the ice I thought it was pretty neat, particularly for the first 24 hours at Pole. But, with all the work I had to get done before the last flight out the novelty wore off pretty quickly. By week 6 all I wanted to do was go home.

Year 2 was more of the same.

Still, I would not have traded the experience for anything.

I hope you make it down! -GS-

From : "Joel M. Moskowitz, M.D." <[moskowi@attglobal.net](mailto:moskowi@attglobal.net)>

Hi Klipsi, I responded to Jim in this email to an original posting by you. I hope this helps:

Yes there is something called a "relief band". It was originally developed to combat seasickness, and is now FDA approved as a medical device to treat pregnancy morning sickness. It is a device that looks like a watch and is worn as such. It emits small (adjustable in 4 steps) electric pulses. I can testify that it does work to combat pregnancy nausea. I would assume it would also work for seasickness.

From : "Katherine Low" <[klow@skynet.be](mailto:klow@skynet.be)>

And especially to help the Eclipse news list with the planning of its 2003 Antarctica Eclipse Expedition, the National Geographic has been so kind to include a very nice map of the continent in its February issue. The path of totality we will have to draw ourselves however. Kris





## Penguins and totality

From : "Olivier Staiger" <klipsi@bluewin.ch> To : <SOLARECLIPSES@AULA.COM> Date : Wed, 27 Feb 2002

howdy folks, how do penguins react to totality ??? several times earlier we discussed observation of animal behaviour during an eclipse. humans cheer, chicken run (!), cows and horses go sleep, birds get silent - or some start singing ? mosquitoes bite... ;-( now, 2003 : what will happen ? how do PENGUINS react to sudden darkness ? I GUESS this has never been studied before ? They don't expect nightfall for another few months. But all of a sudden, it is dark ! what will be their reaction ? are they silent ? or not ?

In 1997 I recorded the awesome screams of little penguins at night on Kangaroo Island, you can hear it at <http://eclipse.span.ch/penguinsKI.wav> (best with MS I.E., maybe not with Netscape ? if not, open your media player and enter the location) this was a normal night, and they scream like this all night !!! now, IMAGINE this: you are in Antarctica, with a few hundreds or thousands of penguins. And sudden darkness arrives... will they ALL scream like this ??? ... (wow !!!) see, and listen to, <http://eclipse.span.ch/penguins.mpg> for a video clip / trailer, 1.88 MPEG video

if possible, instead of simply watching the eclipse offshore from the icebreaker, I'd rather try to get dropped (by boat or chopper) to a nearby penguin rookery or gathering area (within the zone of totality, of course, e.g. near Mirniy station) and observe their reaction. Just imagine being in the middle of 5000 Emperor penguins during totality and they all go screaming like crazy !!!! This must be THE experience of a lifetime !!!!! so we'll ask the Captain of the ship what is doable, and if anybody on the ship wants to join with me on this extra adventure, we could split the cost that will arise from this (by chopper or boat). And if all goes well I'll call you via Iridium satphone and we'll stream the audio sound live on the web ! Now I don't really know right now if large penguin areas are known within the near-Mirniy area. The Emperor penguin rookeries we'll visit are , it seems to me, outside, halfway between Davis station and Mirniy. We'll have to find out what is doable within totality zone.

From : Fraser Farrell <fraser@trilobytes.com.au>

> now, 2003 : what will happen ? how do PENGUINS react to sudden darkness

There are several reports of Antarctic penguins falling over backwards at their first encounter with humans. This is thought to be their "astonishment" or "fainting" reaction. It seems that the penguin initially sees the human(s) at a distance, notes that they are upright bipedal creatures and therefore concludes they are also penguins. It's only on close approach by the human (s) that the penguin realizes its error. I guess from a penguin's perspective, a human would be an enormous, garishly coloured, and deformed "penguin".

As for solar eclipses, many animals respond with their typical sunset routine, probably because the time from 1st contact to totality is comparable to twilight duration. What they do at totality is another issue which I presume is dependent on the animal's level of sentience. I note in passing that at the 1976 Oct 23 eclipse, the cows near where I was observing (Mt Schanck) certainly \_didn't\_ go to sleep - in fact they bellowed and ran about in their paddock.

But in the Antarctic, sunset is a leisurely affair which takes many days. And for most penguins it's a signal to head north (or for Emperor penguins, stay put and incubate the egg), so there may be hormonal changes involved? I think a solar eclipse is too fast to trigger these behaviours so I reckon all you're going to see is a lot of bewildered penguins....

I also recall during the 2000 July total lunar eclipse that third contact (after nearly two hours of totality under a cloudless sky) was rapidly followed by a chorus of birds starting their usual pre-sunrise routines. It was about an hour before the birds realized they had been fooled, shut up, and went back to sleep. A few hours later the same birds were exceptionally late in reacting to the real dawn. My neighbour's chickens, for example, didn't move or make a sound until the sun had been up for 1/2 hour!

> In 1997 I recorded the awesome screams of little penguins at night on Kangaroo Island, you can hear it at <http://eclipse.span.ch/penguinsKI.wav> (best with MS I.E., maybe not with Netscape ? if not, open your media player and enter the location) this was a normal night, and they scream like this all night !!!

These are Fairy Penguins (*Eudyptalus minor*) which can be found around all non-tropical Australian coastlines, New Zealand, and associated islands. There will certainly be colonies of them near Ceduna because of the abundance of fish there, and the many

(Continued on page 45)

T  
S  
E

stretches of rocky coastline and islands. These penguins prefer nesting between (or under) big boulders for greater protection from storms, and to avoid snakes. The famous penguin colony on Philip Island is unusual because the penguins there nest in sand burrows.

BTW Fairy Penguins only make that sort of noise when they are squabbling over nest sites in breeding season, or being harassed by cats, dogs, or tourists. Usually they are very quiet. I've walked through their colonies at night - including some on K.I. - many times and not seen or heard any penguins at all, because they are hiding among the boulders. Best times to spot them is shortly before dawn or soon after sunset, when they are travelling between sea and nest.

> imagine being in the middle of 5000 Emperor penguins during totality and they all go screaming like crazy !!!! This must be THE experience of a lifetime !!!!!!!

I can say from personal experience that even cute little adorable Fairy Penguins will deliver a vicious peck if you upset them. Such as inadvertently standing between them and the rock fissure that conceals their chicks! In fact it was this feisty take-on-all-comers behaviour, during a similar incident on an Australian holiday, that later inspired Linus Torvalds to adopt the penguin as the Linux logo.

I guess that as long as the Emperor penguins don't get panicked or aggressive you should be fine. If not then you will get an unusual place in history: "Man pecked to death by eclipse-crazed penguins" ;- ) cheers, -- Fraser Farrell

From : Glenn Schneider <gschneider@mac.com>

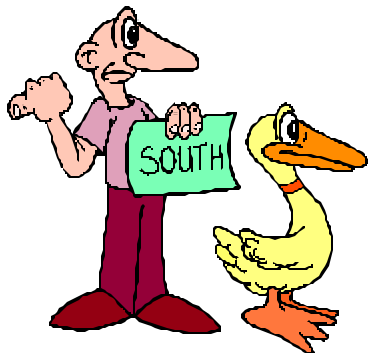
2  
0  
0  
3

This IS an intriguing question (i.e., the reaction of penguins to the eclipse), but the premise is not quite correct. I can't address penguin behavior, I'm an astronomer not an ornithologist (though I would love to learn about it). However, at Myrny (on the Antarctic coast, where such behavior might be studied since inland the density of indigenous fauna is essentially nill) on November 23rd the sun WILL be below the horizon for about 4 hours during the Antarctic "night" shortly before the eclipse. Albeit, the "night" is very bright twilight, as the Sun will only drop to about 3-1/3 degrees below the horizon about 5 hours before totality - but the penguins do experience a diurnal cycle. The ingress for the partial phase of the eclipse begins about 2-1/4 hours after sunrise (the sun will take about 12 minutes to traverse the horizon) when it is 8-1/2 degrees us. So, the little critters will experience an unscheduled twilight -- and it is likely (almost certainly) to be darker than the "darkest" part of the "night". I guess I'm just saying it won't be that sudden, but who knows what they "expect". -GS-



### Eclipse 2003 flight booking

From : jdighaye@t-online.de (Jean-Luc L. J. DIGHAYE) To Mr. Phil Asker, Managing Director, Croydon Travel Dear Mr. Asker, I hereby confirm that I am still interested in your 2003 Eclipse Flight, as indicated in the e-mail below, dated 15 Nov 2001. In view of the growing interest for this flight, expressed in SOLARECLIPSES@AULA.COM by Glenn Schneider, Michael Gill et al., I would highly appreciate a reply from your side. "Jean-Luc L. J. DIGHAYE" wrote: Dear Sir/Madam, I have been informed via SOLARECLIPSES@AULA.COM that your Company is planning to operate a flight for observing the Antarctic total solar eclipse of Nov. 23, 2003. The EurAstro Association envisages to send at least one of our eclipse chasers aboard this flight. Could you please



inform us about the flight details? In particular: - Did you already define the aircraft's flight path, where and when should it cross the totality path? - How can we be sure to get a seat next to a window on the sunny side during and around the totality? I understand that a. a seat rotation during totality is quite difficult in view of the brief duration of the totality. It would also highly compromise the image sequences we wish to take; b. first class/business seats are optimum since a clear view of the Sun and of the shadow on the ground is possible. Economy seats behind the wings also provide a view on the ground, albeit blurred by the engines' emissions. Economy seats above the wings provide little view on the ground. - When will it be possible to make preliminary bookings? How much would they cost? - What will be the overall prices for seats in the above mentioned categories? Thank you in advance for your prompt answers. Yours sincerely, Jean-Luc L. J. DIGHAYE, Chairman, EurAstro Association jdighaye@epo.org or jdighaye@t-online.de



## Joanne & Patrick

*The sole Newsletter dedicated to Solar  
Eclipses*



THE SOLAR ECLIPSE NEWSLETTER IS A MONTHLY NEWSLETTER ABOUT SOLAR ECLIPSES EDITED BY PATRICK POITEVIN & JOANNE EDMONDS. FINANCIAL SUPPORT FROM THE RAINBOW SYMPHONY.



THE ELECTRONIC VERSION OF THE SOLAR ECLIPSE NEWSLETTER IS AVAILABLE ON THE WEB PAGE OF FRED ESPENAK.

[MrEclipse.com](http://www.MrEclipse.com)

THE SOLAR ECLIPSE NEWSLETTER IS FREE OF CHARGE, BUT IS NOT AVAILABLE IN HARD COPY.

THE ECLIPSE OF THE SUN, 1820 by William Wordsworth (Reading by Derryl Barr at Jo's and PP's wedding 02.02.02)

HIGH on her speculative tower  
Stood Science waiting for the hour  
When Sol was destined to endure  
'That' darkening of his radiant face  
Which Superstition strove to chase,  
Erewhile, with rites impure.

No vapour stretched its wings; no cloud  
Cast far or near a murky shroud;  
The sky an azure field displayed;  
'Twas sunlight sheathed and gently charmed,  
Of all its sparkling rays disarmed,  
And as in slumber laid,--

Or something night and day between,  
Like moonshine--but the hue was green;  
Still moonshine, without shadow, spread  
On jutting rock, and curved shore,  
Where gazed the peasant from his door  
And on the mountain's head.

Sees long-drawn files, concentric rings  
Each narrowing above each;--the wings,  
The uplifted palms, the silent marble lips  
The starry zone of sovereign height--  
All steeped in this portentous light!

All suffering dim eclipse!

Or was it given you to behold  
Like vision, pensive though not cold,  
From the smooth breast of gay Winandermere?  
Saw ye the soft yet awful veil  
Spread over Grasmere's lovely dale,  
Helvellyn's brow severe?

